

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A ligand-binding solid surface comprising:
  - a) a soft metal solid support and
  - b) a heterobifunctional spacer having at least two functional groups, said functional groups including a soft base, said spacer being non-covalently chemi- or physisorbed to said soft metal solid support via soft metal-soft base bonding wherein the soft base is selected from the group consisting of succinimidyl-6-(biotinamido)hexanoate and iodoacetyl.
2. (previously presented) A solid surface of claim 1 in which the soft metal solid support is selected from the group consisting of silver, copper, gold, platinum (II), mercury, mercury (II), thallium, cadmium (II), platinum (IV) and palladium (II) covered surfaces.
3. (previously presented) A solid surface of claim 1 in which the heterobifunctional spacer comprises a hydrocarbon having a chain length of about 10 to about 40 carbon atoms.
4. (currently amended) A solid surface of claim 1 wherein the heterobifunctional spacer is comprises succinimidyl-6-(biotinamido)hexanoate.
5. (currently amended) A method for preparing a ligand-binding solid surface, comprising:
  - a) selecting a soft metal solid support; and
  - b) non-covalently immobilizing a heterobifunctional spacer on said solid support via soft metal-soft base bonding, said spacer having at least two functional groups, said functional groups including a soft base, wherein the soft base is selected from the group consisting of succinimidyl-6-(biotinamido)hexanoate and iodoacetyl.
6. (previously presented) A method of claim 5 in which the soft metal solid support is selected from the group consisting of silver, copper, gold, platinum (II),

mercury, mercury (II), thallium, cadmium (II), platinum (IV) and palladium (II) covered surfaces.

7. (previously presented) A method of claim 5 in which the heterobifunctional spacer comprises a hydrocarbon of about 10 to about 40 atoms in length.

8. (currently amended) A method of claim 5 wherein the heterobifunctional spacer is comprises succinimidyl-6-(biotinamido)hexanoate.

9. (previously presented) An assay system comprising a plurality of surfaces of claim 1.

10. (previously presented) A method for detecting the presence of a biological molecule comprising exposing a sample containing biological molecules to a surface of claim 1, wherein the heterobifunctional spacer includes a ligand for binding to said biological molecules.

11. (previously presented) A surface of claim 1 further comprising an oligonucleotide.

12. (previously presented) A solid surface of claim 1 in which the heterobifunctional spacer is succinimidyl 6-[6-(((iodoacetyl)amino)-hexanoyl)amino]hexanoate.

13. (previously presented) A method of claim 5 wherein the heterobifunctional spacer is succinimidyl 6-[6-(((iodoacetyl)amino)-hexanoyl)amino]hexanoate.

14. (currently amended) A ligand-binding solid surface comprising:  
a) a soft metal solid support and  
b) a heterobifunctional spacer having at least two functional groups, said functional groups including a soft base and an N-hydroxy succinimide ester, said spacer being non-covalently chemi- or physisorbed to said soft metal solid support via soft metal-soft base bonding wherein the soft base is selected from the group consisting of

RSH, RS<sup>-</sup>, R<sub>2</sub>S, RSSR, CN<sup>-</sup>, S<sub>2</sub>O<sub>3</sub><sup>2-</sup>, I<sup>-</sup>, R<sub>3</sub>P, (RO)<sub>3</sub>P, C<sub>2</sub>H<sub>4</sub> and C<sub>6</sub>H<sub>6</sub> group, where R is an organic group.

15. (previously presented) A solid surface of claim 14 in which the soft metal solid support is selected from the group consisting of silver, copper, gold, platinum (II), mercury, mercury (II), thallium, cadmium (II), platinum (IV) and palladium (II) covered surfaces.

16. (previously presented) A solid surface of claim 14 in which the heterobifunctional spacer comprises a hydrocarbon having a chain length of about 10 to about 40 carbon atoms.

17. (currently amended) A method for preparing a ligand-binding solid surface, comprising:

- a) selecting a soft metal solid support; and
- b) non-covalently immobilizing a heterobifunctional spacer on said solid support via soft metal-soft base bonding, said spacer having at least two functional groups, said functional groups including a soft base and an N-hydroxy succinimide ester, wherein the soft base is selected from the group consisting of RSH, RS<sup>-</sup>, R<sub>2</sub>S, RSSR, CN<sup>-</sup>, S<sub>2</sub>O<sub>3</sub><sup>2-</sup>, I<sup>-</sup>, R<sub>3</sub>P, (RO)<sub>3</sub>P, C<sub>2</sub>H<sub>4</sub> and C<sub>6</sub>H<sub>6</sub> group, where R is an organic group.

18. (previously presented) A method of claim 17 in which the soft metal solid support is selected from the group consisting of silver, copper, gold, platinum (II), mercury, mercury (II), thallium, cadmium (II), platinum (IV) and palladium (II) covered surfaces.

19. (previously presented) A method of claim 17 in which the heterobifunctional spacer comprises a hydrocarbon of about 10 to about 40 atoms in length.

20. (previously presented) An assay system comprising a plurality of surfaces of claim 14.

21. (previously presented) A method for detecting the presence of a biological molecule comprising exposing a sample containing biological molecules to a surface of claim 14, said surface further comprising an oligonucleotide attached to said heterobifunctional spacer, wherein said oligonucleotide attached to the heterobifunctional spacer is adapted for binding to said biological molecules.

22-24. (canceled)